

REMARKS

The Office Action dated July 31, 2003 has been carefully reviewed and the following response has been made in consequence thereof.

Claims 1-4 and 6-20 are now pending in this application. Claims 1-20 are rejected. Claim 5 has been canceled.

The objection to the disclosure is respectfully traversed. The disclosure has been amended to overcome the informalities identified by the Office Action. For the reasons set forth above, Applicants request that the objection to the disclosure be withdrawn.

The objection to the specification is respectfully traversed. The specification has been amended to provide proper antecedent basis for the claimed subject matter. For the reasons set forth above, Applicants request that the objection to the specification be withdrawn.

The objection to the drawings is respectfully traversed. The reference numeral (14) has been added to Figures 3 and 4. Replacement formal drawings with the appropriate corrections are submitted herewith. The specification has been amended to include the reference numeral (68). For the reasons set forth above, Applicants request that the objection to the drawings be withdrawn.

The rejection of Claims 5 and 14 under 35 U.S.C. § 112 is respectfully traversed. Claims 5 and 14 have been amended to overcome the informalities identified by the Office Action. For the reasons set forth above, Applicants request that the rejection of Claims 5 and 14 be withdrawn.

The rejection of Claims 1-20 under 35 U.S.C. § 103 as being unpatentable over C.A. Heuer, U.S. Patent No. 3,173,479, (hereinafter referred to as "Heuer") in view of Kawabata et al., U.S. Patent No. 5,211,219, (hereinafter referred to as "Kawabata") is respectfully traversed.

Heuer describes a spiral coil heat exchanger mounted on a base (26) on which is also mounted a conventional sealed motor-compressor unit (27) within a central opening (11) of the condensor. The motor-compressor unit serves to discharge compressed refrigerant by a

suitable conduit system (not shown) into an inlet (23) of a spirally wound condenser (10). As in conventional refrigerator systems, the motor-compressor unit and condenser are further connected with a conventional evaporator plate, so that the various components provide a series flow relationship, from the motor-compressor unit to the condenser and to the evaporator plate, for a refrigerant fluid therein. In this arrangement, the compressed refrigerant gases are discharged, from the motor-compressor, into the inlet of the spiral condenser for cooling and condensation therein. Thereafter, cooled and liquified refrigerant gases are discharged as a liquid from an outlet (22) of the spiral condenser into an evaporator plate wherein the refrigerant is evaporated and returned to the motor-compressor unit. Also, the spiral condenser has also disposed within its central opening a fluid impeller (28) structurally supported therein by any suitable manner, as, for example, upon a conventional electrical motor having an extended shaft (30) on which are mounted conventional fluid moving blades (31).

Kawabata describes a casing of a wall type air conditioner to be fixed to a wall (20) close to a ceiling (21) in a room. Casing (1) is rectangular box-shaped and has an air inlet (2) opened at its upper surface and an air outlet (4) at a corner part of its front lower part. An air flow passage 5 is formed in the casing 1, extending from air inlet to air outlet. A heat exchanger (10) and a cross flow fan (6) are arranged in series, from air inlet toward air outlet, in an air flow passage (5). As shown by a broken line in FIG. 1, the air in the room is taken in casing from air inlet by cross flow fan and the air taken in is heated or cooled by heat exchanger and is blown off through air outlet.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Heuer according to the teachings of Kawabata. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Heuer nor Kawabata describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Heuer with Kawabata because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures,

other than Applicants' own teaching. Only the conclusory statement that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made use Kawabata's teaching in Heuer's condenser to let air pass through the member to increase the heat transfer area of the tube and fin member" suggests combining the disclosures. Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, neither Heuer nor Kawabata describe or suggest forming a tube and wire member into a spiral including first and second ends and a longitudinal passageway therebetween and closing the first end, thereby preventing longitudinal air flow through the first end.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Specifically, the Examiner has not pointed to any prior art that teaches or suggests a reasonable expectation of success or motivation in combining the disclosures, other than Applicants' own teaching.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Heuer is cited for a heat exchanger with a compressor mounted therein, and Kawabata is cited for a heat exchanger which bends at an acute angle. Since there is no teaching, suggestion, or motivation in the cited art for the claimed combination, the Section 103 rejection appears to be clearly based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to

deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 1-20 be withdrawn.

Further, and to the extent understood, neither Heuer nor Kawabata, considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 1 which recites a method for increasing the efficiency of a refrigerator condenser assembly including a tube and wire member having an inner edge and an outer edge, the method including the steps of "forming the tube and wire member into a spiral including first and second ends and a longitudinal passageway therebetween; closing the first end, thereby preventing longitudinal air flow through the first end; and mounting a rotatable fan blade assembly at the second end of the longitudinal passageway, the fan blade drawing air into the longitudinal passageway substantially perpendicularly to an outer surface of the tube and wire member".

Neither Heuer nor Kawabata, alone or in combination, describe or suggest a method for increasing the efficiency of a refrigerator condenser assembly including a tube and wire member having an inner edge and an outer edge, the method including the steps of forming the tube and wire member into a spiral including first and second ends and a longitudinal passageway therebetween, closing the first end, thereby preventing longitudinal air flow through the first end, and mounting a rotatable fan blade assembly at the second end of the longitudinal passageway, the fan blade drawing air into the longitudinal passageway substantially perpendicularly to an outer surface of the tube and wire member. Moreover, neither Heuer nor Kawabata, alone or in combination, describe or suggest mounting a rotatable fan blade assembly at the second end of the longitudinal passageway, the fan blade drawing air into the longitudinal passageway substantially perpendicularly to an outer surface of the tube and wire member. Rather, Heuer describes a fluid impeller 28 disposed within a central opening of coil 10. See Col. 4, lines 54-61. Kawabata describes a heat exchanger bent at an acute angle and does not describe or suggest mounting a rotatable fan blade assembly at the second end of the longitudinal passageway. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Heuer in view of Kawabata.

Claims 2-4 and 6 depend from independent Claim 1. When the recitations of Claims 2-4 and 6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-4 and 6 likewise are patentable over Heuer in view of Kawabata.

Claim 7 recites a “refrigerator condenser comprising a spiraled tube and wire member”. Neither Heuer nor Kawabata, alone or in combination, describe or suggest a refrigerator condenser comprising a spiraled tube and wire member. Moreover, the preamble of Claim 7 describes a refrigerator condenser. Rather, both Heuer and Kawabata describe heat exchangers.

As the Federal Circuit has recognized “[A] claim preamble has the import that the claim as a whole suggests for it.” *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995). If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is “necessary to give life, meaning, and vitality” to the claim, then the claim preamble should be construed as if in the balance of the claim. *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 480-81 (CCPA 1951); *see also Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997); *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989).

With regard to Claim 7, the preamble to Claim 7 is necessary to give proper meaning to Claim 7. Without the preamble to Claim 7, only a “spiraled tube and wire member” remains. Thus, the preamble in Claim 7 should be construed as if in the balance of the claim.

For at least the reasons set forth above, Claim 7 is submitted to be patentable over Heuer in view of Kawabata.

Claims 8-13 depend from independent Claim 7. When the recitations of Claims 8-13 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 8-13 likewise are patentable over Heuer in view of Kawabata.

Claim 14 recites a refrigerator condenser assembly including “a spiraled tube and wire member comprising a first end, a second end, and a passage therebetween; a fan blade assembly mounted at said second end and external to said passage; and a closure member

mounted at said first end, said closure member preventing air from entering said passage through said first end”.

Neither Heuer nor Kawabata, alone or in combination, describe or suggest a refrigerator condenser assembly including a spiraled tube and wire member including a first end, a second end, and a passage therebetween, a fan blade assembly mounted at the second end and external to the passage, and a closure member mounted at the first end, the closure member preventing air from entering the passage through the first end. Moreover, neither Heuer nor Kawabata, alone or in combination, describe or suggest a fan blade assembly mounted at the second end and external to the passage. Rather, Heuer describes a fluid impeller 28 disposed within a central opening of coil 10. Kawabata describes a heat exchanger bent at an acute angle and does not describe or suggest mounting a rotatable fan blade assembly at the second end of the longitudinal passageway. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Heuer in view of Kawabata.

Claims 15-20 depend from independent Claim 14. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-20 likewise are patentable over Heuer in view of Kawabata.

Applicants therefore respectfully request that the Section 103 rejection of Claims 1-20 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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